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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,648	01/11/2002	Phillip J. Edwards	4189-PA4	9386

7590 12/02/2003

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EXAMINER	
LIN, TINA M	
ART UNIT	PAPER NUMBER
2874	

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/044,648	EDWARDS ET AL.	
	Examiner	Art Unit	
	Tina M Lin	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This Office action is responsive to applicant's communication filed on 20 October 2003. Corrections of the minor informalities are noted by the Examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,529,535 B2 to Katayama et al., and in view of U.S. Patent 6,374,021 B1 to Nakanishi et al. Katayama et al. discloses a laser light source (1), a monitoring diode (3), a lensed fiber (2) with an optical element positioned to receive light, and a reflecting surface on the optical element positioned to reflect a portion of the light onto the monitoring diode. But Katayama et al. fails to disclose a drive electronics system connected to the light source and the monitoring diode to drive the current and control the current supplied to the light source. Katayama et al. fails to disclose any method to drive the light source and monitoring diode. However, Nakanishi et al. discloses a similar device with a laser (light source) modulated by a driver circuit, a monitor diode that monitors the output of the laser, a lens system positioned to receive light, a light-transmitting window and an optical fiber end. Since Katayama et al. and Nakanishi et al. both discuss similar structures of light source monitoring apparatuses, and since Katayama et al. fails to disclose any type of source to power to light source, it would have been obvious at the time

the invention was made to a person having ordinary skill in the art to have used drive electronics to supply a current to the laser light source.

Claims 2-9, and 12-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,529,535 B2 to Katayama et al., and in view of U.S. Patent 6,374,021 B1 to Nakanishi et al. and in further view of U.S. Patent Application 2003/0053222 A1 to Togami et al. In regards to claims 2-9, Katayama et al. and Nakanishi et al. both disclose all discussed above but fails to disclose a lens, which is a focusing curved lens adjacent to the light source, another lens, which is planar adjacent to the light terminal where the lens adjacent to the light source provides more optical power than the one adjacent to the light terminal and the second lens to be a molded plastic lens. However, Togami et al. does disclose an optical assembly with multiple lenses. One of the lenses is positioned adjacent of the light source, another positioned adjacent of the photodiode and another positioned adjacent of the light terminal. Furthermore, Togami et al. discloses the lens adjacent to the light source to be a collimating lens, also known as a focusing lens and for the lenses to have curved surfaces and that the lenses are made of molded plastic. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed a lens adjacent to the light source, photodiode and light terminal in order to control, focus and direct the light beams more efficiently. (Figure 4 and 5)

In regards to claims 12-29, Katayama et al. discloses a laser light source (1), a monitoring diode (3), a lensed fiber (2) with an optical element positioned to receive light, and a reflecting surface on the optical element positioned to reflect a portion of the light onto the monitoring diode. But Katayama et al. fails to disclose a drive electronics system connected to the light

source and the monitoring diode to drive the current and control the current supplied to the light source. Katayama et al. fails to disclose any method to drive the light source and monitoring diode. However, Nakanishi et al. discloses a similar device with a laser (light source) modulated by a driver circuit, a monitor diode that monitors the output of the laser, a lens system positioned to receive light, a light-transmitting window and an optical fiber end. Since Katayama et al. and Nakanishi et al. both discuss similar structures of light source monitoring apparatuses, and since Katayama et al. fails to disclose any type of source to power to light source, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have used drive electronics to supply a current to the laser light source. Furthermore, Katayama et al. and Nakanishi et al. both fail to disclose a lens, which is a focusing curved lens adjacent to the light source, another lens, which is planar adjacent to the light terminal where the lens adjacent to the light source provides more optical power than the one adjacent to the light terminal and the second lens to be a molded plastic lens. However, Togami et al. does disclose an optical assembly with multiple lenses. One of the lenses is positioned adjacent of the light source, another positioned adjacent of the photodiode and another positioned adjacent of the light terminal. Furthermore, Togami et al. discloses the lens adjacent to the light source to be a collimating lens, also known as a focusing lens and for the lenses to have curved surfaces and that the lenses are made of molded plastic. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have placed a lens adjacent to the light source, photodiode and light terminal in order to control, focus and direct the light beams more efficiently. (Figure 4 and 5)

Applicant's arguments filed 20 October 2003, with respect to Claims 1-29 have been fully considered and are persuasive. The previous rejections in the Office action mailed 19 June 2003 has been withdrawn. Furthermore, Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection. This action is **not** made final.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference B discusses another monitoring light source apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tina M Lin whose telephone number is (703) 305-1959. The examiner can normally be reached on Monday-Friday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

TML

John D. Lee
Primary Examiner